

In the Claims:

Please amend Claims 1, 3, 5- 8, 10, 12, and 13-14 as indicated below. The status of all pending claims is as follows:

5/3
C-1

1. (Currently Amended) A head positioning control method for a storage disk device which ~~comprises;~~ comprises:
~~a storage disk~~ multiple storage disks each having two recording faces, each recording face storing ~~position~~ servo signals;
a plurality of heads that read information ~~from the~~ from each of said storage disk, ~~one~~ disks, one of the heads being a ~~reference~~ standard head, each head reading information from a different recording face of one of said storage disk ~~storage disks~~;
an actuator that moves said heads; and
a control circuit that positions said heads based on the ~~position~~ servo signal signals read from said recording face of faces of said storage disk, ~~by disks by~~ using a selected head, said method comprising:
a step of synchronizing a time of a ~~detection~~ servo gate signal of said selected head to which switching is directed, for detecting said ~~position~~ servo signal with a time of said ~~position~~ servo signal read by said selected head to which switching is directed, in response to a head switching cue; and

a step of reading said ~~position~~ servo signal from an output signal of said ~~switched and selected~~ head in response to said synchronized ~~detection~~ servo gate signal and positioning said ~~switched~~ head according to said read ~~position~~ servo signal,

wherein said synchronizing step comprises:

a step of determining a time for reading said ~~position~~ servo signal from said output signal of said ~~switched~~ head, in response to said head switching cue; and

C. 1 a step of synchronizing the time of said ~~detection~~ servo gate signal with said determined time,

and wherein said determining step comprises:

a step of reading a first discrepancy time between said ~~reference~~ standard head and a ~~present~~ current head, and reading a second discrepancy time between said ~~reference~~ standard head and said ~~switched~~ head; and

a step of calculating the time difference between said first and second discrepancy times to determine said time.

2. (Cancelled)

3. (Currently Amended) The head positioning control method for a storage disk device of ~~Claim 2~~, Claim 1, wherein said time determining step comprises a

step for determining said time of a value greater than one sample period for said positioning control.

4. (Cancelled)

5. (Currently Amended) The head positioning control method for a storage disk device of ~~Claim 2~~, Claim 1, wherein said time determining step comprises a step for determining the time difference between the detection time of said ~~position~~ servo signal for the head from which said switching originates and the detection time of said ~~position~~ servo signal for the head to which said switching is directed,

and wherein said synchronizing step comprises a step for time-shifting ~~the said detection~~ said servo gate signal for said time difference.

6. (Currently Amended) The head positioning control method for a storage disk device of Claim 5, wherein said time determining step comprises:

a step of determining the detection time of said ~~position~~ servo signal for the head from which said switching originates;

a step of determining the detection time of said ~~position~~ servo signal for the head to which said switching is directed; and

a step of determining the time difference between the two detection times.

7. (Currently Amended) The head positioning control method for a storage disk device of Claim 1, wherein said positioning step comprises:

a step of calculating, in response to said head switching cue, the time difference between the detection time for the head from which the said switching originates and the detection time for the head to which said switching is directed;

a step of determining whether or not the said time difference is shorter than one sample interval; and

a step of inhibiting positioning in response to said ~~detection~~ servo gate signal when said time difference is shorter than one sample interval.

8. (Currently Amended) A head positioning control device for a storage disk apparatus, comprising:

~~a storage disk~~ multiple storage disks each having two recording faces, each recording face storing ~~position~~ servo signals;

a plurality of heads that read information ~~from the~~ from each of said ~~storage disk, storage disks,~~ one of said ~~reference~~ heads being a ~~reference~~ standard head, each

head reading information from a different recording face of one of said storage disk; storage disks;

an actuator that moves said heads; and

a control circuit that positions said heads based on the position servo signal read from said recording face of said storage disk, by disk using a selected head,

wherein said control circuit comprises:

C, a synchronization circuit that, in response to a head switching cue, synchronizes the time of a detection servo gate signal, of said selected head to which switching is directed, for detecting said position servo signal with the time of the position servo signal read by said selected head to which switching is directed, and

a processing circuit that, in response to said synchronized detection signal, reads the position servo signal from an output signal of said selected head and, in response to the read position signal, positions the heads,

wherein said synchronization circuit comprises:

a memory for storing a discrepancy time between said reference standard head and each said head; and

a circuit for determining a time for reading said position servo signal from said output signal of a said of said selected head to which switching is directed, in response to said head switching cue, and synchronizing the time of said detection servo gate signal with said determined time,

and wherein said circuit reads a first discrepancy time between said ~~reference~~ standard head and a present head and a second discrepancy time between said ~~reference~~ standard head and said ~~switched~~ and selected head; and calculates the time difference between said first and second discrepancy times to determine said time.

9. (Cancelled)

C 10. (Currently Amended) The head positioning control device for a storage disk apparatus of ~~claim 9~~, Claim 8, wherein said synchronization circuit comprises a circuit that determines said time the value of which is greater than one sample period for said positioning control.

11. (Cancelled)

12. (Currently Amended) The head positioning control device for a storage disk apparatus of ~~Claim 9~~, Claim 8, wherein said synchronization circuit comprises:
a circuit that determines the time difference between the detection time of said ~~position~~ servo signal for the head used prior to switching and the detection time of said ~~position~~ servo signal for the head to which said switching is directed; and

a circuit that shifts in time said ~~detection~~ servo gate signal by that time difference.

13. (Currently Amended) The head positioning control device for a storage disk apparatus of ~~Claim 11~~, Claim 8, wherein said synchronization circuit comprises a circuit for determining from said memory the detection time of said ~~position~~ servo signal for the head used prior to said switching and the detection time of the said ~~position~~ servo signal for the head to which said switching is directed, and calculating the time difference between the two detection times.

14. (Currently Amended) The head positioning control device for a storage disk apparatus of Claim 8, wherein said processing circuit comprises a circuit that determines whether or not the time difference between the detection time for head used prior to said switching and the detection time for the head to which said switching is directed is less than one sample interval and that, when said time difference is shorter than one sample interval, inhibits positioning in response to said ~~detection~~ servo gate signal.